

Minutes for Rule 21 Working Group Meeting 56
Pacific Gas and Electric, Oakland
July 20, 2004

There were 27 working group members in attendance. The next meeting is scheduled for Sacramento, hosted by CEC, on August 31, 2004.

Scott Tomashefsky, Chair

Pat	Aldridge	SCE	Scott	Lacy	SCE
Manuel	Alvarez	SCE	Robin	Luke	RealEnergy
Chuck	Arthur	Arthur Eng	Tony	Mazy	ORA
Mike	Behnke	BEW Engineering	Randy	Minnier	MPE Consulting
Bill	Brooks	Endecon Engineering	Robert	Patrick	Valley Air Solutions
George	Couts	SCE	Edan	Prabhu	Reflective Energies
Tom	Dossey	SCE	Dara	Salour	RCM Digesters
Bill	Erdman	BEW Engineering	Nora	Sheriff	CAC/EPUC
Steven	Frank	PG&E	Chuck	Sorter	BluePoint Energy
Jeff	Goh	PG&E	Gerome	Torribio	SCE
Mike	Iammarino	SDG&E	Dan	Tunnicliff	SCE
Karl	Iliev	SDG&E	Mohammad	Vaziri	PG&E
Jerry	Jackson	PG&E	Chuck	Whitaker	Endecon Engineering

Utility Interconnection Activity Status Reports

The utility activity status reports were not updated from the last meeting. Scott Tomashefsky asked whether there was an influx of interconnection requests in light of the 2200 Emerging Renewables Rebate requests in the last month. No utilities noticed any problems, but it may be too close to the requests for the utilities to be impacted.

IEEE 1547 Interconnection Standard

The next workgroup meeting is in Las Vegas in early August. It is expected that 1547.1, the testing standard, will be adopted in mid-2005. 1547.2 and 1547.3 are still in work and 1547.4 will begin at the Las Vegas meeting.

Rule 21 Compilation Document

SDG&E projected they will be filing their Advice Letter with the PUC in August, 2004. It is currently in internal review and preparation of the document.

PG&E and SCE anticipates waiting for SDG&E for the filing.

FOCUS-II Report

The final FOCUS-II report is in the process of being submitted to the CEC. The first phase of the monitoring project is completed and there is a presentation that was prepared for the CEC. A summary of that report is found in the final FOCUS-II report. The technical group is being asked for input on the first phase to feed into the second phase of testing as part of the FOCUS-III project.

Bin List

A Bin List is being developed for items that were not resolved during the last revision. If you have items, please send an email to Chuck@CSolt.net. One issue was raised relative to PG&E's new interconnection handbook. That handbook is not finalized but should be in the near future.

Rule 21 Application Form

The final draft of the revised application form is with Mike Iammarino and the current draft will stand. If any significant issue still exists, those comments should be sent to him at

miammarino@semprautilities.com. Once the Rule 21 Advice Letters are submitted, the existing application form at that time will be used. The new application form will be submitted by Advice Letter by all three utilities simultaneously after the Rule 21 Advice Letter is done.

OIR R.04-03-017

There was a brief discussion on the possible role of the Rule 21 Working Group in the DG OIR. There was a joint CEC/CPUC workshop on May 5 at the CEC to address the cost/benefit issue.

DUIT Presentation

Mike Behnke presented some of the latest results from the DUIT (Distributed Utility Integration Test) project anti-islanding testing. The DUIT facility is at the PG&E test facility in San Ramon. A copy of the presentation will be made available on the CEC website. Mr. Behnke also gave a brief review of where the UL 1741 (Standard for Inverters, Converters, and Controllers for use in Independent Power Systems).

Technical Breakout

Technical Action Items

The Technical Group reviewed the Action Items list. A general comment/question was whether certain technical items should be added to the Supplemental Review Guideline or the California Interconnection Handbook. On the one hand, the Supplemental Review Guideline was intended to provide guidance to the utility engineer when an application failed one or more of the Initial Review Process Screens, and some of the proposed technical topics apply to systems regardless of whether or not they pass the IRP. On the other hand, the CIG is directed towards the system owner and it was felt by some that the level of technical information may be too detailed for that document. It was left to be decided on a case by case basis.

T105 Inadvertent Export

There were no objections to Bill Cook's suggested reference in section 6.2.3 to the new annex on Inadvertent Export. However, it was suggested that rather including the definition there, to add it to the definitions section (Section 2).

T107 Alternate Relay Test

Moh Vaziri will review status and report back at the next meeting.

T127 Line Section Definition

Moh noted that recent PG&E experience suggested the need to include the primary fuse on a shared secondary transformer as a line section boundary. In the past, this had been explicitly excluded from the definition; Dr Vaziri will document PG&E experience for the next meeting.

T126 PG&E White Paper

The PG&E white paper was reviewed in a previous meeting and remains open for discussion on the issues within the document. The white paper explains PG&E's understanding of their application of Rule 21. Tony Mazy ask that it be noted that the Rule 21 workgroup has not adopted nor approved the PG&E white paper. Jerry Jackson reiterated his desire to recirculate the document in the near future with the addition of info on machine-based technology, Spot Network Interconnections, and newly approved relays.

T110 Networks

Randy Minnier noted that PG&E had developed a write-up on interconnection to spot networks. The committee requested a copy be submitted by PG&E for our review.

C101 Export Screen

The remainder of the day was spent again discussing the export screen. Prior to the meeting, a message was circulated to the technical workgroup asking for opinions on 1) preferred title/question for screen and a list of possible questions had been generated at the previous meeting; and 2) preferred disposition of the term "incidental" in Option 3 (choices were define, delete, leave as is). In addition, Dr. Vaziri had

proposed a change to the flow chart adding one or two more screens that would deal with systems that “would export power across the PCC”. There was general agreement with the content of the proposal—the details of the new screens will be developed by Dr Vaziri and Karl Iliev.

As is often the case with the technical committee, the three options suggested for the term “incidental” were not sufficient. A fourth option was suggested, change the word to something less ambiguous. There was surprising agreement to the term “negligible”, which would likely be inserted as a simple descriptive adjective without further definition.

At the last meeting, the group discussed the Cook/Illiev proposal to limit machine based DG under Option 3 to 10 Amps of primary current (originally 200kW was proposed but in keeping with the spirit of Rule 21, the issue is a matter of current level, not just DG capacity). In San Diego, the group discussed whether this number should be 10 Amps (which was roughly based on 10% of the current capacity of the smallest primary conductor used by the three IOU’s) or whether the criteria could be more generally be written as 10% of the smallest conductor between the customer and the substation. Jim Skeen was unable to complete his analysis on the appropriateness of these two approaches. We discussed at length the validity of establishing a requirement lacking any hard technical data or analysis. It was pointed out that it’s generally acceptable in the standards arena to base requirements on the consensus of a group of competent experts; which is in fact how many of criteria in the Initial Review Process were arrived at initially.

Following on last meeting’s announcement by Jim Skeen that he would be retiring from SMUD in the not too distant future, Tony Mazy announced that this would likely be his last meeting as a representative of the CPUC. Don Shultz will probably be taking over Tony’s duties. While it would be appropriate to say that their contributions will be sorely missed, we are all hopeful that they will be able to continue their participation in some new to-be-defined role.

Respectfully Submitted:

Bill Brooks
Chuck Whitaker

Approved:

Scott